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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,935	11/21/2003	Yang Hwan No	K-0553	7540
34610 7590 06/14/2007 KED & ASSOCIATES, LLP P.O. Box 221200 Chantilly, VA 20153-1200			EXAMINER PATEL, RITA RAMESH	
			ART UNIT 1746	PAPER NUMBER
			MAIL DATE 06/14/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/717,935	Applicant(s) NO ET AL.	
	Examiner Rita R. Patel	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/28/07 has been entered.

Response to Applicant's Arguments / Amendments

This Office Action is responsive to the amendment filed on 2/28/07. Claims 1 and 4-23 are pending. Claims 2-3 have been canceled. In view of the claim amendments Applicant's arguments are considered persuasive and the former 35 USC 102 rejection has been overcome. However, upon further consideration, the instant claims are rejected under new grounds of rejections and thus, claims 1 and 4-23 are rejected for the reasons of record.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 includes the following limitation in lines 2-3 of said claim, "at least one second rib configured to prevent water from accessing a heater installed in the tub". In Figure 2 of applicant's drawings, rib 100(102) and heater 70 are depicted, however, the heater is not configured in relation to rib 100(102) in a manner that prevents water from accessing it because it is located *within* the tub and water travels throughout the tub. It is unclear with respect to applicant's claims how rib 100(102) is configured to prevent water from accessing the heater, when the heater is located in the tub which receives water; the rib 100(102) is solely located on the left-hand side of the heater in applicant's Figure 2 and does not prevent all water from accessing the heater. In the Specification, on page 7, Paragraph [0029, lines 15-16, it is recited that "the heating body 71 is substantially disposed in the tub 20, and more precisely, in the cavity 20b to generate heat for heating the water", said disclosure indicates that water is in the tub part known as cavity 20b, whereby the heating body heats the water; consequently, the Specification does not enable a second rib configured to prevent water from accessing a heater in the tub because the heater in the tub is actually submerged in

Art Unit: 1746

water. The purpose of the heater is to be submerged in water and heat the water for washing purposes.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4-13, 19, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Rode et al. (US Patent No. 6,341,507).

Rode teaches a washing machine having a water container 2 (tub), drum 6 (drum), four-armed support cross 11 (protecting member) at an outer surface of the water container configured to divert water away from a drive motor 10 (electrical component/motor), and rib 21 (rib/first rib).

Water in the Rode's washing machine is accumulated on an interior of the housing, specifically in the water container 2 during washing functions. A four-armed support cross 11 shown in Fig. 3 is affixed to a marginal abutment 2a formed by the circumferential wall 2b of the wash water container 2 and a crimped portion of its bottom 2c (col. 5, lines 24-27); thus reading on a protecting member formed integral with the tub or attached to the tub. As shown in Fig. 3, the ribs 21 are depicted from an aerial view, in Fig. 2, ribs 21 are shown from a side view; it is illustrated that the rib 21 has a

predetermined conical curvature. As shown in Fig. 1, roller bearings 13a, 13b maintain the position of the motor and the rib at a predetermined gap.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rode as applied to claims above, and further in view of Broker et al. herein referred to as "Broker" (US 2003/0051296 A1).

Rode teaches the claimed invention, except is silent on a heating mechanism for heating for heating the water in said washing machine. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate a heater to Rode for achieving warm or hot water distribution. Broker teaches a known heating mechanism commonly used in washing machines with an outer cabinet shell 5 (housing); outer tub 25 (tub); side-loading inner tub 12 (drum). Broker discloses a heater 170 constituting a sheathed electric heating element 182 having a terminal electrical connectors 183 and 184; electrical connectors 183 and 184 project through a gasket 185 and a mounting plate 186. The heating mechanism of Broker is easily removable/added to the washing machine by sliding it in/out of the front side of a sealing device 60. Broker's mounting plate 186 and gasket 185 arrangement reads on

Art Unit: 1746

applicant's claim for a pair of second ribs configured to prevent water from accessing a heater installed within the tub. See Figure 3 and 4. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the heater feature of Broker to Rode to sense and modify temperature of the washing liquid during a certain operating cycle. More specifically, Broker teaches the heater is commonly activated during a stain cycle option; if the temperature of the washing liquid is less than a predetermined temperature, additional time is added to a portion of the stain cycle in order to enhance the stain removal sequence (Paragraph [0006]). Performing efficient stain removal means in a washing machine via a heater is a known feature in the art of clothes washing machines as taught by Broker.

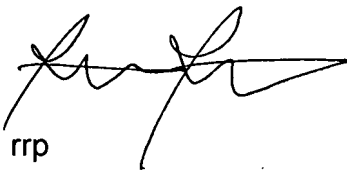
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



rrp

MICHAEL KORNAKOV
PRIMARY EXAMINER

